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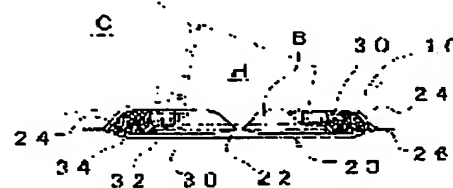
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(54) LIQUID ABSORPTION MAT FOR LIVESTOCK DRESSING AND RETENTION SHEET FOR LIQUID ABSORPTION PILLOW MATERIAL

(57)Abstract:

PROBLEM TO BE SOLVED: To surely recover a liquid component such as blood occurring in livestock dressing in a BSE (bovine spongy encephalitis) infection examination, or the like.

SOLUTION: A liquid absorption mat is laid under livestock C in dressing or after dressing. The liquid absorption mat is equipped with a liquid absorption pillow material 30 for absorbing the liquid component released from the livestock C and a retention sheet 20 for retaining the liquid absorption pillow material 30. The retention sheet 20 comprises a bottom part 22 composed of a flexible liquid-impermeable sheet and a peripheral wall part 24 which is composed of a flexible liquid-impermeable sheet, arranged in a beltlike state along the surface of the external periphery of the bottom part 22 and has an outer circumferential side integrated with the bottom part 22 and an inner peripheral side standable from the bottom part 22. The liquid absorption pillow material 30 is placed on the bottom part 22 of the retention sheet 20 and a part of the liquid absorption pillow material 30 is nipped between the peripheral wall part 24 and the bottom part 22 to make the peripheral wall part 24 in a standing state.



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CLAIMS

[Claim(s)]

[Claim 1]

It is the liquid absorption mat with which the bottom of the livestock after the time of dismantling processing or dismantling processing is covered,

Liquid absorption bolster material which absorbs a part for the liquid emitted from livestock,

It has a maintenance sheet holding said liquid absorption bolster material,

Said maintenance sheet,

The bottom surface part which consists of a flexible non-liquid-permeable sheet,

It consists of a flexible non-liquid-permeable sheet, and is arranged along the periphery side top face of said bottom surface part band-like, a periphery side is a bottom surface part and really formed, and an inner circumference side is equipped with the peripheral wall section which can stand up to a bottom surface part,

Said liquid absorption bolster material is put on the bottom surface part of said maintenance sheet, a part of liquid absorption bolster material is put between said peripheral wall sections and bottom surface parts, and the peripheral wall section is in the standing-up condition.

The liquid absorption mat for livestock dismantling.

[Claim 2]

The liquid absorption wafer in which said liquid absorption bolster material has absorbency is the liquid absorption bag body which it comes to fill up the hold bag which has dipping nature.

The liquid absorption mat for livestock dismantling according to claim 1.

[Claim 3]

Said liquid absorption wafer comes to judge absorptivity polymer combination pulp paper, pulp paper, a nonwoven fabric, and the ingredient chosen from the group which consists of a web in the shape of a strip of paper,

Said hold bag is produced with the ingredient chosen from the group which consists of a laminating sheet of a mesh-like nonwoven fabric, a porous nonwoven fabric, a mesh-like nonwoven fabric, and a porous nonwoven fabric.

The liquid absorption mat for livestock dismantling according to claim 2.

[Claim 4]

It is the maintenance sheet of liquid absorption bolster material used for a liquid absorption mat given in any of claims 1-3 they are,

The bottom surface part which consists of a flexible non-liquid-permeable sheet,

It consists of a flexible non-liquid-permeable sheet, and is arranged along the periphery side top face of said bottom surface part band-like, a periphery side is a bottom surface part and really formed, and an inner circumference side is equipped with the peripheral wall section which can stand up to a bottom surface part.

The maintenance sheet of liquid absorption bolster material.

[Claim 5]

Said non-liquid-permeable sheet is chosen from the group which consists of polyethylene (PE), polypropylene (PP), and polyethylene terephthalate (PET), and is a resin sheet with a thickness of 50-150 micrometers.

The maintenance sheet of liquid absorption bolster material according to claim 4.

[Claim 6]

The width of face W of said peripheral wall section is 5-15cm,

The width of face W of the peripheral wall section and the side length L have the relation of $W/L=0.075-0.15$.

The maintenance sheet of liquid absorption bolster material according to claim 4 or 5.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]

This invention is aimed at the liquid absorption mat with which the bottom of livestock is covered so that body fluid, such as blood, may not diffuse around, and the maintenance sheet holding the liquid absorption bolster material used for this liquid absorption mat, when disassembling livestock, such as a cow, or keeping the livestock after dismantling in detail about the liquid absorption mat for livestock dismantling, and the maintenance sheet of liquid absorption bolster material.

[0002]

[Description of the Prior Art]

In recent years, BSE (bovine spongiform encephalopathy) infection of livestock, especially a cow has been a big problem.

As for the cow with the misgiving of BSE infection, overhaul inspection is conducted. The check of there being no BSE infection can be searched for by overhaul inspection about all the cows shipped as meat, or all the cows that died during breeding. In overhaul inspection, a head or a medulla oblongata of a cow etc. is disassembled and an inspection organization is mainly extracted.

Generally, it slaughters and dissolves and the livestock used as meat, such as a cow, are shipped in a slaughterhouse. The floor and slaughter base of a slaughterhouse are washed with water, and after wash water performs purification processing, it is discharged by sewage etc.

[0003]

However, in the overhaul inspection to BSE infection, there is a possibility that an organization with the misgiving of BSE infection or a BSE causative agent may mix in body fluid, such as blood. Like the usual slaughter and a demolition, when water is poured and washed on the bench or the outskirts of it, there is a danger that a BSE causative agent will be emitted to an environment and will be spread.

So, in the case of the above overhaul inspection, collecting all the liquids of the blood which comes out of livestock, vomit, and others, and carrying out disposal by incineration etc. finally is called for.

As a means to collect parts for the liquid produced in the case of overhaul inspection, covering the floor of inspecting space with plastic sheeting is performed, for example. Parts for the liquid which collected on plastic sheeting are collected. Moreover, scattering absorbents, such as sawdust and a newspaper, to the floor beforehand, or scattering them on a liquid, and also making a liquid absorb is performed.

[0004]

In the application for patent No. (advanced technology 1) 226538 [2002 to] which carried out patent application previously, these artificers are indicating the technique of covering the bottom of large-sized livestock, such as a cow, with the goods for absorption of the letter of a bolster which put the wafer of the shape of a strip of paper with absorbency in the bag with dipping nature, or arranging them in in the shape of a bank around large-sized livestock. Said wafer has

far high absorbent ability compared with sawdust and the newspaper which are the usual charge of an absorbent. And if the wafer is changed into the condition of having stuffed the bag, the handling of transportation storage etc. is easy and it is also easy to be easy to do the activity put on the bottom of livestock or a perimeter, and to collect after use.

[0005]

[Problem(s) to be Solved by the Invention]

A part for the liquid which comes out of livestock may be unable to be absorbed completely, the above mentioned goods for absorption, i.e., liquid absorption bolster material, of the letter of a bolster of the advanced technology 1, and it may be unable to collect them.

For example, since a lot of blood etc. is emitted over the quickly large range when big livestock like a cow are disassembled immediately after ***, before being absorbed by the liquid absorption bolster material with which the bottom of livestock was covered, the front face of liquid absorption bolster material may be flowed out, and it may leak to a perimeter.

The liquid absorbed by liquid absorption bolster material may carry out the fall shift of the 1 ** within liquid absorption bolster material, and it may ooze out to the floor of dissolving space. The weight of the livestock which join liquid absorption bolster material, and also when a worker tramples liquid absorption bolster material, the amount of liquid may leak from liquid absorption bolster material. In keeping the disassembled livestock for a while, a liquid oozes with time and ** arises. If the amount of [exceeding the liquid absorption capacity of liquid absorption bolster material] liquid generates, naturally it will leak and come out of a part for a superfluous liquid out of liquid absorption bolster material.

[0006]

Covering the floor of a dismantling site with plastic sheeting, and placing said liquid absorption bolster material on it was also considered. However, the amount of [which leaked on plastic sheeting] liquid will move in the front face of plastic sheeting so that it may flow, and it will leak to the outside of plastic sheeting. Moreover, before using the plastic sheeting to which blood etc. adhered for a degree, it must fully perform washing and sterilization, and its time and effort of an activity increases.

The technical problem of this invention is enabling it to collect certainly parts for a liquid, such as blood generated in dismantling processing of the livestock in the above mentioned BSE infection inspection etc.

[0007]

[Means for Solving the Problem]

The liquid absorption bolster material which absorbs a part for the liquid which the liquid absorption mat for livestock dismantling concerning this invention is a liquid absorption mat with which the bottom of the livestock after the time of dismantling processing or dismantling processing is covered, and is emitted from livestock. It has the maintenance sheet of the liquid absorption bolster material holding said liquid absorption bolster material. Said maintenance sheet It becomes the bottom surface part which consists of a flexible non-liquid-permeable sheet from a flexible non-liquid-permeable sheet. It is arranged along the periphery side top face of said bottom surface part band-like, and a periphery side is a bottom surface part and really formed. An inner circumference side is equipped with the peripheral wall section which can stand up to a bottom surface part, said liquid absorption bolster material is put on the bottom surface part of said maintenance sheet, a part of liquid absorption bolster material is put between said peripheral wall sections and bottom surface parts, and the peripheral wall section is in the standing-up condition.

[0008]

[Dismantling processing of livestock]

The meat cow made the most serious [the problem of BSE infection] as livestock is applicable. The livestock with which the same demolition is presented besides a meat cow are also applicable. For example, a dairy cow, the sheep, a horse, a pig, etc. are applicable. It is effective in especially the large-sized livestock that must disassemble by above the floor level [of a dismantling site], or the amount of a lot of liquids generate at the time of dismantling. In the case of dismantling processing, a BSE causative agent may be diffused and there are

blood, cerebrospinal fluid, serum, etc. as matter for which it is necessary to collect certainly. It is made desirable to also collect urine and vomit.

[0009]

Dismantling processing may be performed to the whole body and it may carry out to a part of bodies, such as a head. BSE infection inspection is sufficient and the activity which cuts the neck of a cow and extracts a medulla oblongata from a head is carried out. In extracting a spine, a nerve cell, etc., dismantling of a drum section or an abdomen is also needed.

Also except BSE infection inspection, it is applied also to various inspection or dismantling processing in which it is necessary to prevent diffusion of blood etc. similarly.

In case the liquid absorption mat for livestock dismantling of this invention performs these dismantling processings, the bottom of livestock is covered with it. It can be used also in case livestock after performing dismantling processing are kept.

[0010]

By the approach of dismantling processing, the case where the bottom of the whole body of livestock is covered, and some bottoms may be covered. It is desirable to cover the existing anxious part to which parts for a liquid, such as blood, are emitted, or the amount of liquid shifts at least.

A liquid absorption mat is equipped with liquid absorption bolster material and its maintenance sheet.

[Liquid absorption bolster material]

Liquid absorption bolster material absorbs a part for the liquid emitted from livestock.

If the absorption function for a liquid occurs, especially the material of construction and structure of liquid absorption bolster material will not be limited. Various kinds of charges of an absorber currently used for liquid absorption of blood and others can be used. The ingredient which can absorb body fluid, such as blood with which viscosity contains many organic substances etc. highly compared with liquids, such as water, good is desirable.

[0011]

What is necessary is just to have the solid configuration which has fixed thickness and area as a configuration of liquid absorption bolster material. When a part of liquid absorption bolster material is put between the bottom surface part of a maintenance sheet, and the peripheral wall section at the time of use, while being held certainly, what can maintain the peripheral wall section of a maintenance sheet in the condition of having fully stood up is desirable. For example, a rectangle, a polygon, an ellipse, a round shape, etc. are mentioned as a flat-surface configuration. Although a flatbed with the whole fixed thickness is made, some which make circular, an ellipse, an ellipse form, a trapezoid, etc. have others and a vertical section. Although it changes as a dimension of liquid absorption bolster material also with conditions, such as an application of a liquid absorption mat, and the number of liquid absorption bolster material used for a liquid absorption mat, the thing of the range whose thickness die length of one side is 30-70cm, and is 3-8cm can usually be used in a flat-surface configuration. In addition, in the case of that in which liquid absorption bolster material has deformans, the above-mentioned dimension is specified with the dimension in the condition of having put.

[0012]

There are a laminating board object which carried out the laminating of absorbency existing web material and plate as structure of liquid absorption bolster material, and a Plastic solid which comes to fabricate an absorbent ingredient. What specifically fabricated foaming resin, such as what carried out the laminating of water absorption paper or the absorptivity nonwoven fabric, and urethane foam with absorbency, is mentioned. There are also what sandwiches the fine particles of the high absorptivity ingredient which consists of absorptivity resin etc. between the web materials by which the laminating was carried out, and a thing which made the porous water absorption ingredient support the absorptivity matter.

Furthermore, there is a liquid absorption bag body as a desirable gestalt of liquid absorption bolster material.

[Liquid absorption bag body]

It comes to fill [the hold bag which has dipping nature] up the wafer of the charge of an

absorbent which has absorbency, grain, and a block. The charge of an absorbent does not dissipate but it is easy to maintain the configuration of liquid absorption bolster material by using a hold bag.

[0013]

As a charge of an absorbent, although chaff, an absorptivity resin particle, grinding pulp, etc. are employable, the liquid absorption wafer explained below is desirable.

<Liquid absorption wafer>

The usual absorbent ingredient can be used as an ingredient of a liquid absorption wafer. For example, papers, such as pulp paper, a textile, a nonwoven fabric, a web, fiber accumulation cloth, and a porosity resin sheet are mentioned. Used paper, such as a newspaper, can also be used. What blended the absorptivity polymer with paper or cloth can be used. An ingredient with flexible deformans is desirable. When livestock are carried, an elastic ingredient has cushioning properties, and they can stabilize for it and support it. Usually, although the shape of a flat sheet is made, there may be irregularity, a wrinkle, and a fold, or it may be twisted, or may be curving. The hole may have opened or it may be a mesh-like. Absorbency can be raised according to such structure.

[0014]

In order to carry out incineration disposal of the liquid absorption mat, as for the ingredient suitable for incineration processing, it is desirable as an ingredient of a liquid absorption wafer that harmful gas does not occur at the time of incineration etc.

The configuration of a liquid absorption wafer is [that the clearance which it is easy to produce a strip-of-paper-like, i.e., rectangle, thing, and will be mutually become entangled, and the amount of liquid passes or is held is easy to be formed] suitable. In addition, there is also a thing of a triangle, a polygon, circular, an ellipse, an ellipse form, and a that which is irregular the periphery side and the indeterminate form whose configuration is not fixed. There is also a thing of the shape of the shape of a rod or a string. When using the scrap wood currently used for another application, it may be an indeterminate form or a dimension may not be fixed, either.

[0015]

Although the dimension of a liquid absorption wafer changes also with the quality of the material or military requirements, it can set thickness as 0.2-3mm preferably 0.1-10mm, for example. The die length of a liquid absorption wafer can be preferably set as 50-200mm 10-1000mm. The width of face of a liquid absorption wafer can be preferably set as 10-30mm 2-100mm.

By using a liquid absorption wafer, the surface area which absorbs a part for a liquid increases. The clearance between liquid absorption wafers can carry out absorption passage of the part for a liquid quickly in an operation like capillarity, and can make the amount of liquid shift to an internal liquid absorption wafer efficiently from the liquid absorption wafer by the side of a front face. By having filled up the hold bag with the liquid absorption wafer, liquid absorption wafers are not scattered about or it does not adhere to livestock. Handling and recovery become easy.

[0016]

<Hold bag>

While holding so that liquid absorption wafers may not be scattered about, a part for the liquid emitted from livestock is passed good, and it sends into a liquid absorption wafer. The configuration maintenance nature of liquid absorption bolster material is secured. Consequently, when a liquid absorption bag body is put between the bottom surface part of a maintenance sheet, and the peripheral wall section, the standing-up condition of the peripheral wall section can maintain good.

As for the ingredient of a hold bag, a textile, a nonwoven fabric, paper, the open cell sheet of synthetic resin, etc. are mentioned. The porous nonwoven fabric of a nonwoven fabric excellent in dipping nature is desirable. Although not limited especially as fiber which constitutes a nonwoven fabric, it is desirable that a rayon fiber and pulp fiber are included. As the manufacture approach of a nonwoven fabric, a thermal bond nonwoven fabric, a span bond nonwoven fabric, a chemical bond nonwoven fabric, etc. can be used. The mesh ingredient with a coarse eye is excellent in dipping nature. The magnitude of a mesh can be set as extent which does not have a liquid absorption wafer dedropping. Although what has dipping nature for the material itself is

desirable, a fine through tube can be formed in a sheet material without dipping nature, and dipping nature can also be given to it. The mesh ingredient knit with the ingredient of un-dipping nature can also be used. What carried out the laminating of two or more material sheets can be used. For example, improvement in good dipping nature or a mechanical strength can be achieved, a liquid absorption wafer carrying out omission prevention, if an eye carries out the laminating of the mesh sheet with the coarse eye knit with the ingredient which was excellent in reinforcement at the fine thin sheet to extent which can prevent omission of a liquid absorption wafer.

[0017]

The bag structures of holding various goods, such as a package bag and a transportation bag, can be used for the structure of a hold bag. For example, the periphery of the web material of two sheets is stuck and a bag can be constituted. The both ends of tubed sheet stock are closed and it is made to a bag. What folded up the web material of one sheet to box-like becomes a bag. Two or more pieces of a sheet are stuck in three dimensions, and a bag can also be constituted.

If a surfactant etc. is applied or infiltrated into the front face of a hold bag, it will become easy to absorb a part for a liquid.

[The maintenance sheet of liquid absorption bolster material]

Liquid absorption bolster material is held. A part for the liquid which did not pass liquid absorption bolster material or was not absorbed by liquid absorption bolster material is held certainly, and diffusion out of a liquid absorption mat is prevented.

[0018]

A maintenance sheet is equipped with a bottom surface part and the peripheral wall section. All consist of flexible non-liquid-permeable sheets. You may consist of non-liquid-permeable sheets with same bottom surface part and peripheral wall section, and the non-liquid-permeable sheet with which the quality of the material differs from thickness etc. may be used.

<A non-liquid-permeable sheet>

There is non-liquid permeability which can prevent passage for a liquid of the blood emitted from livestock, and the sheet material which has the mechanical property [handling / a mechanical property] is used. It is desirable to have the nontransparent nature of extent which does not penetrate even if the weight of livestock is added. The mechanical strength which is torn at the time of use or a hole cannot suit easily is also required.

[0019]

A supple ingredient is used, in order for liquid absorption bolster material to put and to enable standing-up actuation of the peripheral wall section by it. Even if the weight of livestock is added or a worker's treading stress is added because it is supple, it is hard coming to be damaged. It can fold up before use, or it can round off, and transportation and storage can be performed in the low condition of **. Also by the abandonment activity after use, it can collect small and can be dealt with.

In order to carry out incineration disposal of the liquid absorption mat, as for the ingredient suitable for incineration processing, it is desirable that harmful gas does not occur at the time of incineration etc.

As a concrete ingredient of a non-liquid-permeable sheet, polyolefin resin sheets, such as polyethylene (PE) and polypropylene (PP), and a polyethylene terephthalate (PET) resin sheet are mentioned. The hydrocarbon resin sheet which does not contain a halogen can also be used. A textile or a nonwoven fabric, paper, etc. can be used other than a resin sheet. What carried out coating formation of the liquids-and-solutions layer of non-liquid permeability at the sheet material with liquid permeability may be used. What carried out the laminating of dipping nature or the absorbency sheet to the inside of a non-liquid-permeable sheet can be used.

[0020]

Although the thickness of a non-liquid-permeable sheet changes also with the quality of the material and military requirements, it can usually be set as 50-150 micrometers. 50-120 micrometers is desirable.

what prepared fine irregularity by embossing although the non-liquid-permeable sheet was

usually flat, and a ridge -- the thing of a thing cross-section wave which has a pattern can be used.

As a property of a non-liquid-permeable sheet, that whose tensile strength is 500 - 2,000 N/m and 10 - 50% of elongation percentages is suitable. When the non-liquid-permeable sheet has the stacking tendency, it is desirable for the property of both directions in every direction to go into the above-mentioned conditions.

<Bottom surface part>

According to the magnitude of the livestock which carry a bottom surface part on it, the approach of a demolition, etc., the quality of the material, a configuration, and a dimension are set up.

[0021]

The flat-surface configuration of a bottom surface part determines the shape of an appearance of a maintenance sheet and a liquid absorption mat. Usually, rectangles, such as a square, are adopted from the ease of manufacture and handling. In addition, there are a triangle, a polygon, circular, an ellipse, an ellipse form, etc. There may be a bend doubled with livestock and the gestalt of an activity, irregularity, the vena contracta, etc.

A bottom surface part consists of above mentioned flexible non-liquid-permeable sheets. The quality of the material can be changed on the outskirts of a center and the outskirts of a bottom surface part, or a non-liquid-permeable sheet can also be made into double coursed. An adhesives layer can be prepared in a joint with the peripheral wall section, or a heat-sealing material layer can also be prepared. Skid processing can also be performed to the rear face of a bottom surface part.

[0022]

<Peripheral wall section>

Liquid absorption bolster material is put between bottom surface parts, and the function to prevent the leakage for a liquid is achieved because it will be in a standing-up condition. The non-liquid-permeable sheet with which the ingredient of the peripheral wall section is fundamentally common into the ingredient of a bottom surface part is used. Especially when a bottom surface part and the peripheral wall section are produced in one from the same material sheet, it becomes the same non-liquid-permeable sheet. However, with a bottom surface part, when it produces by another member and is really joined to a bottom surface part, a different non-liquid-permeable sheet from a bottom surface part can also be used. For example, if so much [the peripheral wall section which does not contact a floor line] mechanical strength is not required, it can use an ingredient thinner than a bottom surface part. In order to strengthen maintenance of a standing-up condition, the sheet material which has configuration maintenance nature in comparison may be more desirable.

[0023]

The peripheral wall section is arranged along the periphery side top face of a bottom surface part band-like. The periphery side whose band-like peripheral wall section is the side side of one of these is a bottom surface part and really formed. Formation really means unifying in the condition that there is neither a clearance nor a hole. The case where continuation formation of the peripheral wall section and the bottom surface part is carried out with the non-liquid-permeable sheet of one sheet, and the peripheral wall section and the bottom surface part formed separately may be continuously joined along the direction of the side.

The junction to the peripheral wall section and a bottom surface part can apply various kinds of junction means, such as association by others and heat adhesion, attaching by sewing by yarn, a pin, and a rivet. [junction / by various kinds of adhesives] However, in order to prevent the leakage for a liquid in a joint, continuous junction means, such as heat adhesion, are desirable. The ingredient which can be incinerated is used in order to carry out incineration disposal of the maintenance sheet. Coating of the sealing compound can be carried out to a joint, and leakage prevention can also be aimed at to it.

[0024]

The width of face W of the peripheral wall section can put and hold liquid absorption bolster material, and is set as extent which does not leak a part for the liquid which collects inside a

maintenance sheet. Although it changes with the magnitude of a maintenance sheet, configurations, service conditions, etc., specifically, it is usually set as the range of 5–15cm. It is 8–12cm preferably.

When the peripheral wall section is used in the state of standing up, it is a pressure from the inside etc. and it is required to make it for the peripheral wall section to get turned up and not curve outside. As conditions for that, it is desirable for the width of face W of the peripheral wall section and the side length L to have the relation of $W/L=0.075-0.15$.

[0025]

The width of face W of the peripheral wall section may be the dimension same at the perimeter of a maintenance sheet, and may have the place of the width of face W which changes with locations. For example, even if it enlarges width of face W and is stopped rather than other side sides, a part for a liquid can enable it to be hard leakage in the side side on which a fuselage is put from the neck of livestock.

The peripheral wall section is usually in the condition which lapped with the periphery side top face of a bottom surface part at a bottom surface part and parallel in the condition of having been joined to the bottom surface part at the time of manufacture of a maintenance sheet. It will be in a standing-up condition because liquid absorption bolster material carries out elasticity deformation or plastic deformation at the time of use.

The peripheral wall section can also be attached in the condition of having stood up to the bottom surface part in the manufacture phase. For example, if the peripheral wall section is constituted taper tubed or in the shape of a trapezoid spindle and it joins to a bottom surface part, even if liquid absorption bolster material is not made to deform, it will change into a standing-up condition. It can fold up or the peripheral wall section manufactured in the state of standing up can also be rounded off so that it may lap with a bottom surface part until it uses it. Whenever [tilt-angle / of the peripheral wall section beforehand formed in the standing-up condition] can be set as about 0–45 degrees.

[0026]

[Wearing of liquid absorption bolster material]

Liquid absorption bolster material is put on the bottom surface part of a maintenance sheet. When liquid absorption bolster material is arranged in the 1st page so that there may be no clearance, the liquid absorption bolster material of the number corresponding to the area of a bottom surface part can be carried. Liquid absorption bolster material can be put in order in the condition of having piled up partly, or space can also be opened and arranged in among liquid absorption bolster material.

The dimension of one liquid absorption bolster material and the weight after liquid absorption decrease, and the handling of abandonment processing etc. becomes easy, so that there is many liquid absorption bolster material put on the maintenance sheet of one sheet. The phenomenon which the amount of liquid flows the front face of liquid absorption bolster material, and leaks outside by a part for a liquid being quickly absorbed by the clearance where liquid absorption bolster material adjoins can be suppressed. However, if there is many liquid absorption bolster material, the time and effort of manufacture processing and the time and effort of wearing on a maintenance sheet will increase. It is desirable to put all liquid absorption bolster material between the bottom of the peripheral wall section, and for location immobilization to be made to be carried out by at least one side.

[0027]

Usually, 2–8 liquid absorption bolster material is put on the maintenance sheet of one sheet. They are 4–6 pieces preferably.

In order to arrange liquid absorption bolster material on a maintenance sheet, it is desirable to insert a part of liquid absorption bolster material in the peripheral wall section bottom, and to make it push in to a part for the corner by the side of the back. It elasticity-deforms or the peripheral wall section is made to deform plastically. A part of bottom surface part may be made to deform with the peripheral wall section.

By this, the peripheral wall section stands up in the condition of having run aground on liquid absorption bolster material. Liquid absorption bolster material is fixed and the location gap in a

demolition can be prevented because the peripheral wall section stops liquid absorption bolster material from a top. The edge of liquid absorption bolster material bending backward, or overflowing on a maintenance sheet is also prevented.

[0028]

The standing-up include angle of the peripheral wall section which changed into the standing-up condition by wearing of liquid absorption bolster material changes with the configuration and thickness of liquid absorption bolster material. A standing-up include angle is changeable in the range in which deformation of the peripheral wall section is permitted. The height of the peripheral wall section increases and the amount for the liquid which can be dammed up inside, and the depth increase, so that a standing-up include angle is large. However, when the standing-up include angle became large too much, a pressure is added from the inside or external force is added, the peripheral wall section bends backward outside and the amount of liquid leakage-comes to be easy on the contrary. The desirable standing-up include angle in the condition of having equipped with liquid absorption bolster material is 30-60 degrees.

One side can set the dimension of the whole liquid absorption mat as the range which is 50-200cm. It is 75-110cm preferably. If a liquid absorption mat is too small, absorption maintenance for a liquid cannot fully be performed, but if a liquid absorption mat is too large, it will be hard to do a demolition and the abandonment activity after dismantling.

[0029]

[Embodiment of the Invention]

The operation gestalt shown in drawing 1 -3 shows the liquid absorption mat used for the overhaul inspection of the meat cow to BSE infection.

As shown in drawing 1 , the maintenance sheet 20 is equipped with the liquid absorption bag body 30 with which the liquid absorption mat 10 makes the letter of a bolster.

<The maintenance sheet of liquid absorption bolster material>

As for the maintenance sheet 20, the whole is produced with the flexible polyethylene resin sheet with a thickness of 100 micrometers. The maintenance sheet 20 has the bottom surface part 22 which makes the shape of a square, and the peripheral wall section 24 in which it puts on band-like on the bottom surface part 22 along the periphery side of the bottom surface part 22, and the whole makes the shape of a square frame as shown also in drawing 3 . The bottom surface part 22 and the peripheral wall section 24 are the joints 26 of the shape of a narrow width by which heat adhesion was carried out along with the periphery edge, and it is joined in one.

[0030]

As shown in drawing 3 , the maintenance sheet 20 before constituting the liquid absorption mat 10 is making the shape of a flat sheet which the peripheral wall section 24 piled up in parallel along the bottom surface part 22. The flexible maintenance sheet 20 can be dealt with in the condition of having folded up or having involved in tubed.

As a concrete dimension of the maintenance sheet 20, that in which the width of face of 10cm and a joint 26 can hold [a whole appearance / the width of face of nothing and the peripheral wall section 24] four liquid absorption bag bodys 30 for the square of 100cm angle by about 1cm is mentioned.

<Liquid absorption bag body>

As shown in drawing 1 and 2, the liquid absorption bag body 30 is making the thick letter of a bolster while the whole plan type makes a rectangle. As a concrete dimension of the liquid absorption bag body 30, a thing with a thickness of about 5cm is mentioned for a plan type with one-side the square of 50cm.

[0031]

The liquid absorption bag body 30 has the hold bag 32 which comes to carry out sewing of the nonwoven fabric with dipping nature to saccate, and the liquid absorption wafer 34 with which the hold bag 32 was filled up. The liquid absorption wafer 34 consists of absorptivity polymer combination pulp paper and a porous nonwoven fabric excellent in absorbency, for example, the shape of an about 1x10cm rectangle strip of paper is held in nothing and the hold bag 30 in the amount of 250g.

The number of the liquid absorption bag bodys 30 installed in the liquid absorption mat 10 is set up corresponding to the amount of the liquid generated at the time of dismantling, or the magnitude of livestock to disassemble. For example, what is necessary is just to use about four pieces, in order to use it for dismantling of the usual meat cow in the case of the liquid absorption bag body 30 of the above mentioned dimension. If it is small livestock, at least two pieces are enough. Six pieces can also be used if a lot of liquids may be generated especially.

[0032]

<Liquid absorption mat>

On the maintenance sheet 20, four liquid absorption bag bodys 30 are arranged. As shown in drawing 1, as the liquid absorption bag body 30 is put between the bottom surface part 22 and the peripheral wall section 24, four liquid absorption bag bodys 30 are arranged in each periphery side of the maintenance sheet 20. In fact, the liquid absorption bag body 30 is stuffed into the bottom of the peripheral wall section 24. Two sides of the liquid absorption bag body 30 are put between the bottom of the peripheral wall section 24, and fixed maintenance is carried out. As shown in drawing 2, by the liquid absorption bag body 30 being put, the peripheral wall section 24 starts and it is in the inclination condition which inclined inside for a while. Whenever [tilt-angle] is about 30 degrees.

[0033]

<Demolition>

As shown in drawing 2, at a livestock demolition, the ****(ed) death cow C is laid in the condition that Head H appears on the liquid absorption mat 10, for example. Head H is in the condition which appeared in the center of four liquid absorption bag bodys 30.

In this condition, the neck of Cow C is cleared, Head H is separated from a fuselage, and inspection samples, such as a medulla oblongata, are extracted from Head H.

Body fluid, such as blood generated from the cutting part of Cow C, passes the hold bag 32 of the liquid absorption bag body 30, and is sucked in and held at the liquid absorption wafer 34. A liquid is held also in the clearance between liquid absorption wafer 34 comrades. Even if especially the liquid component with strong or stickiness and high concentration is hard to be absorbed up to the interior of liquid absorption wafer 34 itself, it being held in the clearance between liquid absorption wafer 34 comrades, and flowing out outside of it is lost. Since mutual between is separated, the amount of liquid passes through the clearance between liquid absorption bag body 30 comrades quickly, and four liquid absorption bag bodys 30 enter to the liquid absorption bag body 30 bottom. Since the bottom surface part 22 of the maintenance sheet 20 exists under the liquid absorption bag body 30, the amount of liquid does not leak to a floor. Since the periphery of the bottom surface part 22 is surrounded in the peripheral wall section 24, the amount of liquid does not leak to the outside of the liquid absorption mat 10. Even if the amount of liquid is a liquid which cannot be immediately absorbed easily by the liquid absorption bag body 30, it will be gradually absorbed by the surrounding liquid absorption bag body 30 in the condition of having collected between bottom surface part 22 absentminded.

[0034]

Since the maintenance sheet 20 of non-liquid permeability exists under the liquid absorption bag body 30 even if there is a liquid which is flow, and was been [a liquid / it] sufficient and carried out by the self-weight, after it is not absorbed with the liquid absorption bag body 30 among the liquids which came out of Cow C or 1 ** is absorbed by the liquid absorption bag body 30, leaking to the floor and dismantling base of dissolving space is prevented certainly. Since the peripheral wall section 24 of the maintenance sheet 20 exists in the outside of the liquid absorption bag body 30 especially, a liquid does not begin to leak to the outside of the maintenance sheet 20. Even if the liquid which collected on the bottom surface part 22 of the maintenance sheet 20 flows outside, it can dam up certainly in the peripheral wall section 24. In drawing 2, the oil level (a two-dot chain line shows) of the liquid part B is in a location lower than the peripheral wall section 24, and does not leak to the outside of the peripheral wall section 24.

[0035]

<Processing after a demolition>

A demolition and inspection are completed and disposal of the liquid absorption mat 10 after removing livestock, such as Cow C, is carried out.

At this time, it is necessary to deal with it so that neither the liquid by which absorption maintenance was carried out, nor the liquid which collected on the maintenance sheet 20 may be leaked to the liquid absorption bag body 30 outside.

The whole liquid absorption mat 10 can be carried out putting the liquid absorption bag body 30 on the maintenance sheet 20, and abandonment processing can be presented. The liquid absorption mat 10 can be folded up from an outside to the inside, or can be involved in, and it can also be dealt with in the condition of having collected small. The liquid absorption mat 10 can also be bound and dealt with on a string or a tape from an outside.

[0036]

The liquid absorption bag body 30 can be picked out from the maintenance sheet 20, and it can also be dealt with separately. Only the liquid absorption bag body 30 can be put into another bag for abandonment processing, and can also be dealt with.

Among those for the liquid absorbed by the liquid absorption mat 10, if blood contacts air, it will congeal around pastiness. Blood's which congealed losing and flowing out or giving a fluidity decreases. After being in this condition, handling is easy if the liquid absorption mat 10 is removed from the maintenance sheet 20.

As abandonment processing, incineration disposal is usually desirable.

[Tubed sheet stock]

As for the operation gestalt shown in drawing 4 and drawing 5, said operation gestalt and structure of the maintenance sheet 20 differ from each other.

[0037]

As shown in drawing 5, what cut out the resin sheet fabricated by tubed to predetermined die length as a material of the maintenance sheet 20 is used. On one side of a tube-like object 21, aperture 24a for forming the peripheral wall section 24 is clipped.

If the joint 26 by heat adhesion is formed in such the both-ends side of a tube-like object 21, the maintenance sheet 20 shown in drawing 4 (a) and (b) will be obtained. The peripheral wall section 24 is formed in the outside of aperture 24a the side side on all sides. In the side side which does not form a joint 26, it will be constituted from the bottom surface part 22 by the sheet with which the peripheral wall section 24 continued.

Compared with said operation gestalt, the formation part of the joint 26 by heat adhesion becomes half. Manufacture of a tube-like object 21 can be mass-produced continuously.

[0038]

[Folding formation of the peripheral wall section]

The operation gestalt shown in drawing 6 folds up the flat sheet stock of one sheet, and forms the maintenance sheet 20.

The sheet stock which makes the shape of a rectangle of the magnitude which applied the width of face of the peripheral wall section 24 to the magnitude of the bottom surface part 22 is prepared, and the peripheral wall section 24 consists of turning up each side of sheet stock inside.

As shown in drawing 6 (b), in the four corners of the maintenance sheet 20, the clinch part of the both-sides side which intersects perpendicularly will pile up. Heat adhesion of the superposition part of the side side is carried out, and a joint 26 is formed.

[0039]

With this operation gestalt, the maintenance sheet 20 equipped with the bottom surface part 22 and the peripheral wall section 24 can be manufactured only by the clinch activity and the heat adhesion activity from the rectangle sheet stock of one sheet.

[The maintenance sheet which has a handle part]

While the sheet stock which makes the shape of a rectangle of one sheet is used for the operation gestalt shown in drawing 7, a handle part 27 is formed in the four corners of the maintenance sheet 20.

As shown in drawing 7 (b), the neighborhood of sheet stock is turned up. In the four-corners section, the surplus sheet stock was not folded up like said drawing 6 (b), but is bent from the

location of 45 degrees to the upper part in the middle of both sides. The part bent up becomes the triangle-like handle part 27. Heat adhesion of the part for root Motobe, a handle part 27, is carried out, and a joint 26 is formed.

[0040]

This handle part 27 can be used for the key at the time of lifting the maintenance sheet 20 or moving. If the handle part 27 is turned up on the peripheral wall section 24 of the single-sided side, it will not become obstructive at the handling of transportation storage of the maintenance sheet 20 etc.

If the handle part 27 is unnecessary, cutting removal can also be carried out on a joint 26.

[The inclined peripheral wall section]

The operation gestalt shown in drawing 8 will be inclined by the peripheral wall section 24 to the bottom surface part 22.

Fundamental structure and the fundamental manufacture approach are common in the above mentioned operation gestalt of drawing 7.

[0041]

however, the inclination which becomes high from a periphery side at a central site, without forming a joint 26 in the root of the handle part 27 parallel to the bottom surface part 22 -- it forms in a line.

Consequently, as shown in drawing 8 (b), will be inclined by the peripheral wall section 24 at an include angle theta to the bottom surface part 22. The peripheral wall section 24 of four sides constitutes 4 **** trapezoidal shape as a whole. It is set to whenever [tilt-angle / of theta= 20-60 degrees], i.e., a standing-up include angle, and theta= 30 degrees is more desirable.

With the above-mentioned operation gestalt, in case the maintenance sheet 20 is equipped with the liquid absorption bolster material 30, even if it does not make the peripheral wall section 24 transform, the liquid absorption bolster material 30 can be easily inserted between the peripheral wall section 24 and the bottom surface part 22. However, if the liquid absorption bolster material 30 is pushed in so that the peripheral wall section 24 may be made to transform further, a prevention operation of the liquid absorption bolster material 30 by the peripheral wall section 24 can be strengthened.

[0042]

In addition, at the time of transportation storage of only the maintenance sheet 20, while the peripheral wall section 24 had been made to stand up in the state of an inclination, it may be dealt with, and it can also change into the condition of having folded up the flexible peripheral wall section 24 and having put on the bottom surface part 22.

[Formation of a hanging hole]

The operation gestalt shown in drawing 9 has established the hanging hole in the four corners of the maintenance sheet 20.

The fundamental structure and the fundamental manufacture approach of the maintenance sheet 20 are common in the operation gestalt of said drawing 7, and form the same handle part 27. However, heat adhesion of the whole handle part 27 is carried out, and it is made the thermal bond section 26. Reinforcement can be raised by the sheet stock of two sheets being stuck.

[0043]

The hanging hole 29 has penetrated in the center of a handle part 27. hooking a hook, a rope, etc. on a hanging hole 29, or letting it pass -- migration of the liquid absorption mat 10 -- it has and comes to be able to do raising easily Touching the bottom surface part 22 and the liquid absorption bag body 30 of the maintenance sheet 20 with which the amount of [of livestock] liquid collected is avoided.

The shrinkage ring which consists of the same material as the maintenance sheet 20 can be stuck on the perimeter of a hanging hole 29, and a hanging hole 29 can also be reinforced with the above-mentioned operation gestalt. The piece of a sheet which has the handle part which it has at the time of the handling of the liquid absorption mat 10, and a hanging hole 29

independently [the handle part 27 produced in the four corners by bending of the maintenance sheet 20] can also be stuck on the maintenance sheet 20.

[0044]

[Arrangement of a liquid absorption bag body]

As for the operation gestalt shown in drawing 10 - drawing 12, the magnitude of the liquid absorption bag body 30 and arrangement differ from the operation gestalt of said drawing 1. In the operation gestalt of drawing 10, the maintenance sheet 20 is equipped with a total of six liquid absorption bag bodys 30 of two trains in each three trains. This gestalt is suitable for constituting the liquid absorption mat 10 of a large area in comparison. For example, the application which applies to a large-sized cow or carries the whole body of small livestock is mentioned.

As for the operation gestalt of drawing 11, the rectangular maintenance sheet is equipped with two liquid absorption bag bodys 30. This gestalt is effective in keeping only the head of the livestock after dismantling, when there are few dismantling of small livestock and burst sizes for a liquid.

[0045]

Four liquid absorption bag bodys 30 with which the operation gestalt of drawing 12 makes a rectangle are arranged at the point symmetry form. The space which the bottom surface part 22 of the maintenance sheet 20 has exposed is formed in the center of four liquid absorption bag bodys 30. This space is effective in making the amount of [which was emitted from livestock] liquid reach to the front face of the bottom surface part 22 quickly. It can prevent flowing and falling the front face of the liquid absorption bag body 30 outside. It can use also for inspecting the amount for a liquid, the lump condition of blood, etc. that central space was covered after dismantling.

[0046]

[Example]

The liquid absorption mat 10 of this invention is manufactured, and the result of having evaluated the engine performance is shown.

[Liquid absorption ****a]

"The cone and **S" (trade name) by the environmental device company were used. It is about 50mm in thickness in the rectangle of 350x500mm of appearances. The liquid absorption wafer 34 cuts out absorptivity polymer combination pulp paper [the Ino paper company make] and a porous thermal bond nonwoven fabric [the Kinsei Seishi make and an embossing processing article] in the shape of [of 1cm of die-length / of about 10cm / x ****] a strip of paper. The rayon fiber and the pulp fiber content mesh-like nonwoven fabric [the Sansho Shigyo K.K. make] are used for the hold bag 32. The hold bag 32 is filled up with 200g of liquid absorption wafers 34.

[0047]

[Liquid absorption mat A]

It has the structure shown in drawing 11. The maintenance sheet 20 consists of a polyethylene sheet with a thickness of 100 micrometers, and the rectangle whose appearance is 57x67cm, and the width of face of a joint 26 are width of face of W= 6cm of about 1cm and the peripheral wall section 24, L= 65cm (long side side) of inside distance dimensions of the peripheral wall section 24, i.e., side length, and L= 55cm (shorter side side).

Two pieces and the maintenance sheet 20 were equipped with liquid absorption **** a.

[Liquid absorption mat B]

It has the structure shown in drawing 12. The maintenance sheet 20 consists of a polyethylene sheet with a thickness of 100 micrometers, and the square whose appearance is 77cm per side, and the width of face of a joint 26 are width of face of W= 6cm of about 1cm and the peripheral wall section 24, and L= 75cm of side length of the peripheral wall section 24.

[0048]

Four pieces and the maintenance sheet 20 were equipped with liquid absorption **** a.

[Liquid absorption mat C]

It has the structure shown in drawing 10. The maintenance sheet 20 consists of a polyethylene sheet with a thickness of 100 micrometers, and the square whose appearance is 100cm per side, and the width of face of a joint 26 are width of face of W= 10cm of about 1cm and the peripheral wall section 24, and L= 98cm of side length of the peripheral wall section 24.

Six pieces and the maintenance sheet 20 were equipped with liquid absorption **** a.

[Artificial blood absorption test]

The artificial blood which comes to adjust properties, such as viscosity, like blood was used.

[0049]

The liquid absorption mat A was able to be made to carry out absorption maintenance of the artificial blood of about 8 L. Although several drops of artificial blood dispersed around during the activity, it was extent which is satisfactory practically.

The liquid absorption mat B was able to be made to carry out absorption maintenance of the artificial blood of about 12 L. There was no scattering to a perimeter.

[Dismantling implementation trial]

1) BSE infection inspection of a cow with a weight of about 600kg was conducted using the liquid absorption mat C. The ****(ed) death cow is laid to the floor of a demolition place, a little head of a cow is raised, the liquid absorption mat C is inserted into the bottom of it, and it was made for the head of a cow to appear on the liquid absorption mat C. Then, the demolition for conducting BSE infection inspection was performed by the usual work habits. Specifically the neck of a cow was cut, the medulla oblongata was taken out from the head, and the inspection sample was extracted.

[0050]

Since it was dismantling immediately after death, comparatively a lot of blood (about 30L) was emitted for a short time. Absorption maintenance of the blood was carried out on the liquid absorption mat C. Although several 10ml blood dispersed around during the activity, it was extent which is satisfactory practically.

After blood solidified, even if the liquid absorption mat C after a demolition took out liquid absorption **** a from the maintenance sheet, blood did not hang it down. The liquid absorption mat C was able to be altogether disposed of by incineration processing.

2) BSE infection inspection of a cow with a weight of about 650kg was conducted using the liquid absorption mat C. Work habits are the same as that of the above. However, the cow about 5 hours after death was used. The blood burst size was presumed about 5L. All the emitted blood could carry out absorption maintenance on the liquid absorption mat C, and there was no blood which leaks on the outskirts.

[0051]

[Evaluation]

The result of the above-mentioned trial showed the following things.

a) If it is the liquid absorption mat C which equipped the 100x100cm maintenance sheet 20 with six liquid absorption **** a, it turns out that it is applicable also to the large-sized livestock immediately after death with many blood burst sizes good. If liquid absorption **** a is changed into a more large-sized thing, it will be thought that at least four pieces can respond. The livestock by which the time amount after death was formed are enough if 2-4 liquid absorption **** a are used.

b) Presume the amount for the liquid emitted by the weight and the inspection approach of livestock,

Liquid adsorption per the total amount / liquid absorption **** for an effluent object = the number of liquid absorption **** a -- (1)

What is necessary will be to be alike and just to use the corresponding liquid absorption mat 10.

[0052]

Since it turned out that the absorption maintenance of the about [abbreviation 5L] blood can be carried out per piece, if said formula (1) is applied, the design of the liquid absorption mat 10 can do liquid absorption **** a.

[0053]

[Effect of the Invention]

It is used for the maintenance sheet which has a bottom surface part and the peripheral wall section for liquid absorption ****, such as a liquid absorption bag body excellent in the absorptivity ability for a liquid, by the liquid absorption mat for livestock dismantling concerning this invention, equipping.

By liquid absorption **** being put between the peripheral wall section and a bottom surface part, location immobilization of the liquid absorption **** is carried out certainly. If the whole liquid absorption mat is made [make it slide in it and] and installed in the bottom of livestock, an activity is far easy rather than it installs liquid absorption **** according to an individual. Even if it moves livestock on liquid absorption **** or an operator appears, the location of liquid absorption **** does not shift.

[0054]

A part for the liquid of the livestock emitted to the liquid absorption mat is quickly absorbable by liquid absorption ****. After the bottom surface part of a maintenance sheet is covered by the amount of [which fell without being absorbed by liquid absorption ****] liquid, it is absorbed by liquid absorption ****. A part for the liquid which oozed out from liquid absorption **** is also caught with a maintenance sheet.

Since it will be in a standing-up condition by liquid absorption **** being put especially between the peripheral wall section of a maintenance sheet, the peripheral wall section dams up certainly that the amount of [collected on the bottom surface part] liquid leaks out of a maintenance sheet.

An insert lump of liquid absorption **** is easy for the peripheral wall section which consists of a flexible web material, and the operation which stops liquid absorption **** in the condition of having been put can also fully be demonstrated. At the time of transportation storage of a maintenance sheet, if the peripheral wall section is put on the bottom surface part, ** becomes low and handling is easy. Since a bottom surface part also consists of a flexible web material, if fold up the whole maintenance sheet, it involves in or it carries out, receipt or conveyance can be performed very much in a compact.

[Brief Description of the Drawings]

[Drawing 1] The top view of the liquid absorption mat showing the operation gestalt of this invention

[Drawing 2] The sectional view of a busy condition

[Drawing 3] The sectional view of the maintenance sheet before use

[Drawing 4] The top view (a) and sectional view (b) showing another operation gestalt of a maintenance sheet

[Drawing 5] The perspective view of a tubed material

[Drawing 6] The top view (a) and important section perspective view (b) of the maintenance sheet showing another operation gestalt

[Drawing 7] The top view (a) and important section perspective view (b) of the maintenance sheet showing another operation gestalt

[Drawing 8] The important section perspective view (a) and top view (b) showing another operation gestalt of a maintenance sheet

[Drawing 9] The important section perspective view of the maintenance sheet showing another operation gestalt

[Drawing 10] The top view of the liquid absorption mat showing another operation gestalt

[Drawing 11] The top view of the liquid absorption mat showing another operation gestalt

[Drawing 12] The top view of the liquid absorption mat showing another operation gestalt

[Description of Notations]

10 Liquid Absorption Mat

20 Maintenance Sheet

21 Tube-like Object

22 Bottom Surface Part

24 Peripheral Wall Section

24a Aperture

26 Joint

27 Handle Part

29 Hanging Hole

30 Liquid Absorption Bag Body

32 Hold Bag

34 Liquid Absorption Wafer

B₁ Oil level

C Cow

H Head

[Translation done.]

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TECHNICAL FIELD

[Field of the Invention]

This invention is aimed at the liquid absorption mat with which the bottom of livestock is covered so that body fluid, such as blood, may not diffuse around, and the maintenance sheet holding the liquid absorption bolster material used for this liquid absorption mat, when disassembling livestock, such as a cow, or keeping the livestock after dismantling in detail about the liquid absorption mat for livestock dismantling, and the maintenance sheet of liquid absorption bolster material.

[0002]

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PRIOR ART

[Description of the Prior Art]

In recent years, BSE (bovine spongiform encephalopathy) infection of livestock, especially a cow has been a big problem.

As for the cow with the misgiving of BSE infection, overhaul inspection is conducted. The check of there being no BSE infection can be searched for by overhaul inspection about all the cows shipped as meat, or all the cows that died during breeding. In overhaul inspection, a head or a medulla oblongata of a cow etc. is disassembled and an inspection organization is mainly extracted.

Generally, it slaughters and dissolves and the livestock used as meat, such as a cow, are shipped in a slaughterhouse. The floor and slaughter base of a slaughterhouse are washed with water, and after wash water performs purification processing, it is discharged by sewage etc.

[0003]

However, in the overhaul inspection to BSE infection, there is a possibility that an organization with the misgiving of BSE infection or a BSE causative agent may mix in body fluid, such as blood. Like the usual slaughter and a demolition, when water is poured and washed on the bench or the outskirts of it, there is a danger that a BSE causative agent will be emitted to an environment and will be spread.

So, in the case of the above overhaul inspection, collecting all the liquids of the blood which comes out of livestock, vomit, and others, and carrying out disposal by incineration etc. finally is called for.

As a means to collect parts for the liquid produced in the case of overhaul inspection, covering the floor of inspecting space with plastic sheeting is performed, for example. Parts for the liquid which collected on plastic sheeting are collected. Moreover, scattering absorbents, such as sawdust and a newspaper, to the floor beforehand, or scattering them on a liquid, and also making a liquid absorb is performed.

[0004]

In the application for patent No. (advanced technology 1) 226538 [2002 to] which carried out patent application previously, these artificers are indicating the technique of covering the bottom of large-sized livestock, such as a cow, with the goods for absorption of the letter of a bolster which put the wafer of the shape of a strip of paper with absorbency in the bag with dipping nature, or arranging them in in the shape of a bank around large-sized livestock. Said wafer has far high absorbent ability compared with sawdust and the newspaper which are the usual charge of an absorbent. And if the wafer is changed into the condition of having stuffed the bag, the handling of transportation storage etc. is easy and it is also easy to be easy to do the activity put on the bottom of livestock or a perimeter, and to collect after use.

[0005]

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention]

It is used for the maintenance sheet which has a bottom surface part and the peripheral wall section for liquid absorption ****, such as a liquid absorption bag body excellent in the absorptivity ability for a liquid, by the liquid absorption mat for livestock dismantling concerning this invention, equipping.

By liquid absorption **** being put between the peripheral wall section and a bottom surface part, location immobilization of the liquid absorption **** is carried out certainly. If the whole liquid absorption mat is made [make it slide in it and] and installed in the bottom of livestock, an activity is far easy rather than it installs liquid absorption **** according to an individual. Even if it moves livestock on liquid absorption **** or an operator appears, the location of liquid absorption **** does not shift.

[0054]

A part for the liquid of the livestock emitted to the liquid absorption mat is quickly absorbable by liquid absorption ****. After the bottom surface part of a maintenance sheet is covered by the amount of [which fell without being absorbed by liquid absorption ****] liquid, it is absorbed by liquid absorption ****. A part for the liquid which oozed out from liquid absorption **** is also caught with a maintenance sheet.

Since it will be in a standing-up condition by liquid absorption **** being put especially between the peripheral wall section of a maintenance sheet, the peripheral wall section dams up certainly that the amount of [collected on the bottom surface part] liquid leaks out of a maintenance sheet.

An insert lump of liquid absorption **** is easy for the peripheral wall section which consists of a flexible web material, and the operation which stops liquid absorption **** in the condition of having been put can also fully be demonstrated. At the time of transportation storage of a maintenance sheet, if the peripheral wall section is put on the bottom surface part, ** becomes low and handling is easy. Since a bottom surface part also consists of a flexible web material, if fold up the whole maintenance sheet, it involves in or it carries out, receipt or conveyance can be performed very much in a compact.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]

A part for the liquid which comes out of livestock may be unable to be absorbed completely, the above mentioned goods for absorption, i.e., liquid absorption bolster material, of the letter of a bolster of the advanced technology 1, and it may be unable to collect them.

For example, since a lot of blood etc. is emitted over the quickly large range when big livestock like a cow are disassembled immediately after ****, before being absorbed by the liquid absorption bolster material with which the bottom of livestock was covered, the front face of liquid absorption bolster material may be flowed out, and it may leak to a perimeter.

The liquid absorbed by liquid absorption bolster material may carry out the fall shift of the 1 ** within liquid absorption bolster material, and it may ooze out to the floor of dissolving space. The weight of the livestock which join liquid absorption bolster material, and also when a worker tramples liquid absorption bolster material, the amount of liquid may leak from liquid absorption bolster material. In keeping the disassembled livestock for a while, a liquid oozes with time and ** arises. If the amount of [exceeding the liquid absorption capacity of liquid absorption bolster material] liquid generates, naturally it will leak and come out of a part for a superfluous liquid out of liquid absorption bolster material.

[0006]

Covering the floor of a dismantling site with plastic sheeting, and placing said liquid absorption bolster material on it was also considered. However, the amount of [which leaked on plastic sheeting] liquid will move in the front face of plastic sheeting so that it may flow, and it will leak to the outside of plastic sheeting. Moreover, before using the plastic sheeting to which blood etc. adhered for a degree, it must fully perform washing and sterilization, and its time and effort of an activity increases.

The technical problem of this invention is enabling it to collect certainly parts for a liquid, such as blood generated in dismantling processing of the livestock in the above mentioned BSE infection inspection etc.

[0007]

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MEANS

[Means for Solving the Problem]

The liquid absorption bolster material which absorbs a part for the liquid which the liquid absorption mat for livestock dismantling concerning this invention is a liquid absorption mat with which the bottom of the livestock after the time of dismantling processing or dismantling processing is covered, and is emitted from livestock, It has the maintenance sheet of the liquid absorption bolster material holding said liquid absorption bolster material. Said maintenance sheet It becomes the bottom surface part which consists of a flexible non-liquid-permeable sheet from a flexible non-liquid-permeable sheet. It is arranged along the periphery side top face of said bottom surface part band-like, and a periphery side is a bottom surface part and really formed. An inner circumference side is equipped with the peripheral wall section which can stand up to a bottom surface part, said liquid absorption bolster material is put on the bottom surface part of said maintenance sheet, a part of liquid absorption bolster material is put between said peripheral wall sections and bottom surface parts, and the peripheral wall section is in the standing-up condition.

[0008]

[Dismantling processing of livestock]

The meat cow made the most serious [the problem of BSE infection] as livestock is applicable. The livestock with which the same demolition is presented besides a meat cow are also applicable. For example, a dairy cow, the sheep, a horse, a pig, etc. are applicable. It is effective in especially the large-sized livestock that must disassemble by above the floor level [of a dismantling site], or the amount of a lot of liquids generate at the time of dismantling. In the case of dismantling processing, a BSE causative agent may be diffused and there are blood, cerebrospinal fluid, serum, etc. as matter for which it is necessary to collect certainly. It is made desirable to also collect urine and vomit.

[0009]

Dismantling processing may be performed to the whole body and it may carry out to a part of bodies, such as a head. BSE infection inspection is sufficient and the activity which cuts the neck of a cow and extracts a medulla oblongata from a head is carried out. In extracting a spine, a nerve cell, etc., dismantling of a drum section or an abdomen is also needed.

Also except BSE infection inspection, it is applied also to various inspection or dismantling processing in which it is necessary to prevent diffusion of blood etc. similarly.

In case the liquid absorption mat for livestock dismantling of this invention performs these dismantling processings, the bottom of livestock is covered with it. It can be used also in case livestock after performing dismantling processing are kept.

[0010]

By the approach of dismantling processing, the case where the bottom of the whole body of livestock is covered, and some bottoms may be covered. It is desirable to cover the existing anxious part to which parts for a liquid, such as blood, are emitted, or the amount of liquid shifts at least.

A liquid absorption mat is equipped with liquid absorption bolster material and its maintenance sheet.

[Liquid absorption bolster material]

Liquid absorption bolster material absorbs a part for the liquid emitted from livestock. If the absorption function for a liquid occurs, especially the material of construction and structure of liquid absorption bolster material will not be limited. Various kinds of charges of an absorber currently used for liquid absorption of blood and others can be used. The ingredient which can absorb body fluid, such as blood with which viscosity contains many organic substances etc. highly compared with liquids, such as water, good is desirable.

[0011]

What is necessary is just to have the solid configuration which has fixed thickness and area as a configuration of liquid absorption bolster material. When a part of liquid absorption bolster material is put between the bottom surface part of a maintenance sheet, and the peripheral wall section at the time of use, while being held certainly, what can maintain the peripheral wall section of a maintenance sheet in the condition of having fully stood up is desirable. For example, a rectangle, a polygon, an ellipse, a round shape, etc. are mentioned as a flat-surface configuration. Although a flatbed with the whole fixed thickness is made, some which make circular, an ellipse, an ellipse form, a trapezoid, etc. have others and a vertical section. Although it changes as a dimension of liquid absorption bolster material also with conditions, such as an application of a liquid absorption mat, and the number of liquid absorption bolster material used for a liquid absorption mat, the thing of the range whose thickness die length of one side is 30-70cm, and is 3-8cm can usually be used in a flat-surface configuration. In addition, in the case of that in which liquid absorption bolster material has deformans, the above-mentioned dimension is specified with the dimension in the condition of having put.

[0012]

There are a laminating board object which carried out the laminating of absorbency existing web material and plate as structure of liquid absorption bolster material, and a Plastic solid which comes to fabricate an absorbent ingredient. What specifically fabricated foaming resin, such as what carried out the laminating of water absorption paper or the absorptivity nonwoven fabric, and urethane foam with absorbency, is mentioned. There are also what sandwiches the fine particles of the high absorptivity ingredient which consists of absorptivity resin etc. between the web materials by which the laminating was carried out, and a thing which made the porous water absorption ingredient support the absorptivity matter.

Furthermore, there is a liquid absorption bag body as a desirable gestalt of liquid absorption bolster material.

[Liquid absorption bag body]

It comes to fill [the hold bag which has dipping nature] up the wafer of the charge of an absorbent which has absorbency, grain, and a block. The charge of an absorbent does not dissipate but it is easy to maintain the configuration of liquid absorption bolster material by using a hold bag.

[0013]

As a charge of an absorbent, although chaff, an absorptivity resin particle, grinding pulp, etc. are employable, the liquid absorption wafer explained below is desirable.

<Liquid absorption wafer>

The usual absorbent ingredient can be used as an ingredient of a liquid absorption wafer. For example, papers, such as pulp paper, a textile, a nonwoven fabric, a web, fiber accumulation cloth, and a porosity resin sheet are mentioned. Used paper, such as a newspaper, can also be used. What blended the absorptivity polymer with paper or cloth can be used. An ingredient with flexible deformans is desirable. When livestock are carried, an elastic ingredient has cushioning properties, and they can stabilize for it and support it. Usually, although the shape of a flat sheet is made, there may be irregularity, a wrinkle, and a fold, or it may be twisted, or may be curving. The hole may have opened or it may be a mesh-like. Absorbency can be raised according to such structure.

[0014]

In order to carry out incineration disposal of the liquid absorption mat, as for the ingredient suitable for incineration processing, it is desirable as an ingredient of a liquid absorption wafer

that harmful gas does not occur at the time of incineration etc.

The configuration of a liquid absorption wafer is [that the clearance which it is easy to produce a strip-of-paper-like, i.e., rectangle, thing, and will be mutually become entangled, and the amount of liquid passes or is held is easy to be formed] suitable. In addition, there is also a thing of a triangle, a polygon, circular, an ellipse, an ellipse form, and a that which is irregular the periphery side and the indeterminate form whose configuration is not fixed. There is also a thing of the shape of the shape of a rod or a string. When using the scrap wood currently used for another application, it may be an indeterminate form or a dimension may not be fixed, either.

[0015]

Although the dimension of a liquid absorption wafer changes also with the quality of the material or military requirements, it can set thickness as 0.2-3mm preferably 0.1-10mm, for example. The die length of a liquid absorption wafer can be preferably set as 50-200mm 10-1000mm. The width of face of a liquid absorption wafer can be preferably set as 10-30mm 2-100mm. By using a liquid absorption wafer, the surface area which absorbs a part for a liquid increases. The clearance between liquid absorption wafers can carry out absorption passage of the part for a liquid quickly in an operation like capillarity, and can make the amount of liquid shift to an internal liquid absorption wafer efficiently from the liquid absorption wafer by the side of a front face. By having filled up the hold bag with the liquid absorption wafer, liquid absorption wafers are not scattered about or it does not adhere to livestock. Handling and recovery become easy.

[0016]

<Hold bag>

While holding so that liquid absorption wafers may not be scattered about, a part for the liquid emitted from livestock is passed good, and it sends into a liquid absorption wafer. The configuration maintenance nature of liquid absorption bolster material is secured. Consequently, when a liquid absorption bag body is put between the bottom surface part of a maintenance sheet, and the peripheral wall section, the standing-up condition of the peripheral wall section can maintain good.

As for the ingredient of a hold bag, a textile, a nonwoven fabric, paper, the open cell sheet of synthetic resin, etc. are mentioned. The porous nonwoven fabric of a nonwoven fabric excellent in dipping nature is desirable. Although not limited especially as fiber which constitutes a nonwoven fabric, it is desirable that a rayon fiber and pulp fiber are included. As the manufacture approach of a nonwoven fabric, a thermal bond nonwoven fabric, a span bond nonwoven fabric, a chemical bond nonwoven fabric, etc. can be used. The mesh ingredient with a coarse eye is excellent in dipping nature. The magnitude of a mesh can be set as extent which does not have a liquid absorption wafer dedropping. Although what has dipping nature for the material itself is desirable, a fine through tube can be formed in a sheet material without dipping nature, and dipping nature can also be given to it. The mesh ingredient knit with the ingredient of un-dipping nature can also be used. What carried out the laminating of two or more material sheets can be used. For example, improvement in good dipping nature or a mechanical strength can be achieved, a liquid absorption wafer carrying out omission prevention, if an eye carries out the laminating of the mesh sheet with the coarse eye knit with the ingredient which was excellent in reinforcement at the fine thin sheet to extent which can prevent omission of a liquid absorption wafer.

[0017]

The bag structures of holding various goods, such as a package bag and a transportation bag, can be used for the structure of a hold bag. For example, the periphery of the web material of two sheets is stuck and a bag can be constituted. The both ends of tubed sheet stock are closed and it is made to a bag. What folded up the web material of one sheet to box-like becomes a bag. Two or more pieces of a sheet are stuck in three dimensions, and a bag can also be constituted.

If a surfactant etc. is applied or infiltrated into the front face of a hold bag, it will become easy to absorb a part for a liquid.

[The maintenance sheet of liquid absorption bolster material]

Liquid absorption bolster material is held. A part for the liquid which did not pass liquid

absorption bolster material or was not absorbed by liquid absorption bolster material is held certainly, and diffusion out of a liquid absorption mat is prevented.

[0018]

A maintenance sheet is equipped with a bottom surface part and the peripheral wall section. All consist of flexible non-liquid-permeable sheets. You may consist of non-liquid-permeable sheets with same bottom surface part and peripheral wall section, and the non-liquid-permeable sheet with which the quality of the material differs from thickness etc. may be used.

<A non-liquid-permeable sheet>

There is non-liquid permeability which can prevent passage for a liquid of the blood emitted from livestock, and the sheet material which has the mechanical property [handling / a mechanical property] is used. It is desirable to have the nontransparent nature of extent which does not penetrate even if the weight of livestock is added. The mechanical strength which is torn at the time of use or a hole cannot suit easily is also required.

[0019]

A supple ingredient is used, in order for liquid absorption bolster material to put and to enable standing-up actuation of the peripheral wall section by it. Even if the weight of livestock is added or a worker's treading stress is added because it is supple, it is hard coming to be damaged. It can fold up before use, or it can round off, and transportation and storage can be performed in the low condition of **. Also by the abandonment activity after use, it can collect small and can be dealt with.

In order to carry out incineration disposal of the liquid absorption mat, as for the ingredient suitable for incineration processing, it is desirable that harmful gas does not occur at the time of incineration etc.

As a concrete ingredient of a non-liquid-permeable sheet, polyolefin resin sheets, such as polyethylene (PE) and polypropylene (PP), and a polyethylene terephthalate (PET) resin sheet are mentioned. The hydrocarbon resin sheet which does not contain a halogen can also be used. A textile or a nonwoven fabric, paper, etc. can be used other than a resin sheet. What carried out coating formation of the liquids-and-solutions layer of non-liquid permeability at the sheet material with liquid permeability may be used. What carried out the laminating of dipping nature or the absorbency sheet to the inside of a non-liquid-permeable sheet can be used.

[0020]

Although the thickness of a non-liquid-permeable sheet changes also with the quality of the material and military requirements, it can usually be set as 50-150 micrometers. 50-120 micrometers is desirable.

what prepared fine irregularity by embossing although the non-liquid-permeable sheet was usually flat, and a ridge -- the thing of a thing cross-section wave which has a pattern can be used.

As a property of a non-liquid-permeable sheet, that whose tensile strength is 500 - 2,000 N/m and 10 - 50% of elongation percentages is suitable. When the non-liquid-permeable sheet has the stacking tendency, it is desirable for the property of both directions in every direction to go into the above-mentioned conditions.

<Bottom surface part>

According to the magnitude of the livestock which carry a bottom surface part on it, the approach of a demolition, etc., the quality of the material, a configuration, and a dimension are set up.

[0021]

The flat-surface configuration of a bottom surface part determines the shape of an appearance of a maintenance sheet and a liquid absorption mat. Usually, rectangles, such as a square, are adopted from the ease of manufacture and handling. In addition, there are a triangle, a polygon, circular, an ellipse, an ellipse form, etc. There may be a bend doubled with livestock and the gestalt of an activity, irregularity, the vena contracta, etc.

A bottom surface part consists of above mentioned flexible non-liquid-permeable sheets. The quality of the material can be changed on the outskirts of a center and the outskirts of a bottom surface part, or a non-liquid-permeable sheet can also be made into double coursed. An

adhesives layer can be prepared in a joint with the peripheral wall section, or a heat-sealing material layer can also be prepared. Skid processing can also be performed to the rear face of a bottom surface part.

[0022]

<Peripheral wall section>

Liquid absorption bolster material is put between bottom surface parts, and the function to prevent the leakage for a liquid is achieved because it will be in a standing-up condition. The non-liquid-permeable sheet with which the ingredient of the peripheral wall section is fundamentally common into the ingredient of a bottom surface part is used. Especially when a bottom surface part and the peripheral wall section are produced in one from the same material sheet, it becomes the same non-liquid-permeable sheet. However, with a bottom surface part, when it produces by another member and is really joined to a bottom surface part, a different non-liquid-permeable sheet from a bottom surface part can also be used. For example, if so much [the peripheral wall section which does not contact a floor line] mechanical strength is not required, it can use an ingredient thinner than a bottom surface part. In order to strengthen maintenance of a standing-up condition, the sheet material which has configuration maintenance nature in comparison may be more desirable.

[0023]

The peripheral wall section is arranged along the periphery side top face of a bottom surface part band-like. The periphery side whose band-like peripheral wall section is the side side of one of these is a bottom surface part and really formed. Formation really means unifying in the condition that there is neither a clearance nor a hole. The case where continuation formation of the peripheral wall section and the bottom surface part is carried out with the non-liquid-permeable sheet of one sheet, and the peripheral wall section and the bottom surface part formed separately may be continuously joined along the direction of the side.

The junction to the peripheral wall section and a bottom surface part can apply various kinds of junction means, such as association by others and heat adhesion, attaching by sewing by yarn, a pin, and a rivet. [junction / by various kinds of adhesives] However, in order to prevent the leakage for a liquid in a joint, continuous junction means, such as heat adhesion, are desirable. The ingredient which can be incinerated is used in order to carry out incineration disposal of the maintenance sheet. Coating of the sealing compound can be carried out to a joint, and leakage prevention can also be aimed at to it.

[0024]

The width of face W of the peripheral wall section can put and hold liquid absorption bolster material, and is set as extent which does not leak a part for the liquid which collects inside a maintenance sheet. Although it changes with the magnitude of a maintenance sheet, configurations, service conditions, etc., specifically, it is usually set as the range of 5-15cm. It is 8-12cm preferably.

When the peripheral wall section is used in the state of standing up, it is a pressure from the inside etc. and it is required to make it for the peripheral wall section to get turned up and not curve outside. As conditions for that, it is desirable for the width of face W of the peripheral wall section and the side length L to have the relation of $W/L=0.075-0.15$.

[0025]

The width of face W of the peripheral wall section may be the dimension same at the perimeter of a maintenance sheet, and may have the place of the width of face W which changes with locations. For example, even if it enlarges width of face W and is stopped rather than other side sides, a part for a liquid can enable it to be hard leakage in the side side on which a fuselage is put from the neck of livestock.

The peripheral wall section is usually in the condition which lapped with the periphery side top face of a bottom surface part at a bottom surface part and parallel in the condition of having been joined to the bottom surface part at the time of manufacture of a maintenance sheet. It will be in a standing-up condition because liquid absorption bolster material carries out elasticity deformation or plastic deformation at the time of use.

The peripheral wall section can also be attached in the condition of having stood up to the

bottom surface part in the manufacture phase. For example, if the peripheral wall section is constituted taper tubed or in the shape of a trapezoid spindle and it joins to a bottom surface part, even if liquid absorption bolster material is not made to deform, it will change into a standing-up condition. It can fold up or the peripheral wall section manufactured in the state of standing up can also be rounded off so that it may lap with a bottom surface part until it uses it. Whenever [tilt-angle / of the peripheral wall section beforehand formed in the standing-up condition] can be set as about 0-45 degrees.

[0026]

[Wearing of liquid absorption bolster material]

Liquid absorption bolster material is put on the bottom surface part of a maintenance sheet. When liquid absorption bolster material is arranged in the 1st page so that there may be no clearance, the liquid absorption bolster material of the number corresponding to the area of a bottom surface part can be carried. Liquid absorption bolster material can be put in order in the condition of having piled up partly, or space can also be opened and arranged in among liquid absorption bolster material.

The dimension of one liquid absorption bolster material and the weight after liquid absorption decrease, and the handling of abandonment processing etc. becomes easy, so that there is many liquid absorption bolster material put on the maintenance sheet of one sheet. The phenomenon which the amount of liquid flows the front face of liquid absorption bolster material, and leaks outside by a part for a liquid being quickly absorbed by the clearance where liquid absorption bolster material adjoins can be suppressed. However, if there is many liquid absorption bolster material, the time and effort of manufacture processing and the time and effort of wearing on a maintenance sheet will increase. It is desirable to put all liquid absorption bolster material between the bottom of the peripheral wall section, and for location immobilization to be made to be carried out by at least one side.

[0027]

Usually, 2-8 liquid absorption bolster material is put on the maintenance sheet of one sheet. They are 4-6 pieces preferably.

In order to arrange liquid absorption bolster material on a maintenance sheet, it is desirable to insert a part of liquid absorption bolster material in the peripheral wall section bottom, and to make it push in to a part for the corner by the side of the back. It elasticity-deforms or the peripheral wall section is made to deform plastically. A part of bottom surface part may be made to deform with the peripheral wall section.

By this, the peripheral wall section stands up in the condition of having run aground on liquid absorption bolster material. Liquid absorption bolster material is fixed and the location gap in a demolition can be prevented because the peripheral wall section stops liquid absorption bolster material from a top. The edge of liquid absorption bolster material bending backward, or overflowing on a maintenance sheet is also prevented.

[0028]

The standing-up include angle of the peripheral wall section which changed into the standing-up condition by wearing of liquid absorption bolster material changes with the configuration and thickness of liquid absorption bolster material. A standing-up include angle is changeable in the range in which deformation of the peripheral wall section is permitted. The height of the peripheral wall section increases and the amount for the liquid which can be dammed up inside, and the depth increase, so that a standing-up include angle is large. However, when the standing-up include angle became large too much, a pressure is added from the inside or external force is added, the peripheral wall section bends backward outside and the amount of liquid leakage-comes to be easy on the contrary. The desirable standing-up include angle in the condition of having equipped with liquid absorption bolster material is 30-60 degrees.

One side can set the dimension of the whole liquid absorption mat as the range which is 50-200cm. It is 75-110cm preferably. If a liquid absorption mat is too small, absorption maintenance for a liquid cannot fully be performed, but if a liquid absorption mat is too large, it will be hard to do a demolition and the abandonment activity after dismantling.

[0029]

[Embodiment of the Invention]

The operation gestalt shown in drawing 1 -3 shows the liquid absorption mat used for the overhaul inspection of the meat cow to BSE infection.

As shown in drawing 1 , the maintenance sheet 20 is equipped with the liquid absorption bag body 30 with which the liquid absorption mat 10 makes the letter of a bolster.

<The maintenance sheet of liquid absorption bolster material>

As for the maintenance sheet 20, the whole is produced with the flexible polyethylene resin sheet with a thickness of 100 micrometers. The maintenance sheet 20 has the bottom surface part 22 which makes the shape of a square, and the peripheral wall section 24 in which it puts on band-like on the bottom surface part 22 along the periphery side of the bottom surface part 22, and the whole makes the shape of a square frame as shown also in drawing 3 . The bottom surface part 22 and the peripheral wall section 24 are the joints 26 of the shape of a narrow width by which heat adhesion was carried out along with the periphery edge, and it is joined in one.

[0030]

As shown in drawing 3 , the maintenance sheet 20 before constituting the liquid absorption mat 10 is making the shape of a flat sheet which the peripheral wall section 24 piled up in parallel along the bottom surface part 22. The flexible maintenance sheet 20 can be dealt with in the condition of having folded up or having involved in tubed.

As a concrete dimension of the maintenance sheet 20, that in which the width of face of 10cm and a joint 26 can hold [a whole appearance / the width of face of nothing and the peripheral wall section 24] four liquid absorption bag bodys 30 for the square of 100cm angle by about 1cm is mentioned.

<Liquid absorption bag body>

As shown in drawing 1 and 2, the liquid absorption bag body 30 is making the thick letter of a bolster while the whole plan type makes a rectangle. As a concrete dimension of the liquid absorption bag body 30, a thing with a thickness of about 5cm is mentioned for a plan type with one-side the square of 50cm.

[0031]

The liquid absorption bag body 30 has the hold bag 32 which comes to carry out sewing of the nonwoven fabric with dipping nature to saccate, and the liquid absorption wafer 34 with which the hold bag 32 was filled up. The liquid absorption wafer 34 consists of absorptivity polymer combination pulp paper and a porous nonwoven fabric excellent in absorbency, for example, the shape of an about 1x10cm rectangle strip of paper is held in nothing and the hold bag 30 in the amount of 250g.

The number of the liquid absorption bag bodys 30 installed in the liquid absorption mat 10 is set up corresponding to the amount of the liquid generated at the time of dismantling, or the magnitude of livestock to disassemble. For example, what is necessary is just to use about four pieces, in order to use it for dismantling of the usual meat cow in the case of the liquid absorption bag body 30 of the above mentioned dimension. If it is small livestock, at least two pieces are enough. Six pieces can also be used if a lot of liquids may be generated especially.

[0032]

<Liquid absorption mat>

On the maintenance sheet 20, four liquid absorption bag bodys 30 are arranged. As shown in drawing 1 , as the liquid absorption bag body 30 is put between the bottom surface part 22 and the peripheral wall section 24, four liquid absorption bag bodys 30 are arranged in each periphery side of the maintenance sheet 20. In fact, the liquid absorption bag body 30 is stuffed into the bottom of the peripheral wall section 24. Two sides of the liquid absorption bag body 30 are put between the bottom of the peripheral wall section 24, and fixed maintenance is carried out.

As shown in drawing 2 , by the liquid absorption bag body 30 being put, the peripheral wall section 24 starts and it is in the inclination condition which inclined inside for a while. Whenever [tilt-angle] is about 30 degrees.

[0033]

<Demolition>

As shown in drawing 2 , at a livestock demolition, the ****(ed) death cow C is laid in the condition that Head H appears on the liquid absorption mat 10, for example. Head H is in the condition which appeared in the center of four liquid absorption bag bodys 30.

In this condition, the neck of Cow C is cleared, Head H is separated from a fuselage, and inspection samples, such as a medulla oblongata, are extracted from Head H.

Body fluid, such as blood generated from the cutting part of Cow C, passes the hold bag 32 of the liquid absorption bag body 30, and is sucked in and held at the liquid absorption wafer 34. A liquid is held also in the clearance between liquid absorption wafer 34 comrades. Even if especially the liquid component with strong or stickiness and high concentration is hard to be absorbed up to the interior of liquid absorption wafer 34 itself, it being held in the clearance between liquid absorption wafer 34 comrades, and flowing out outside of it is lost. Since mutual between is separated, the amount of liquid passes through the clearance between liquid absorption bag body 30 comrades quickly, and four liquid absorption bag bodys 30 enter to the liquid absorption bag body 30 bottom. Since the bottom surface part 22 of the maintenance sheet 20 exists under the liquid absorption bag body 30, the amount of liquid does not leak to a floor. Since the periphery of the bottom surface part 22 is surrounded in the peripheral wall section 24, the amount of liquid does not leak to the outside of the liquid absorption mat 10. Even if the amount of liquid is a liquid which cannot be immediately absorbed easily by the liquid absorption bag body 30, it will be gradually absorbed by the surrounding liquid absorption bag body 30 in the condition of having collected between bottom surface part 22 absentminded.

[0034]

Since the maintenance sheet 20 of non-liquid permeability exists under the liquid absorption bag body 30 even if there is a liquid which is flow, and was been [a liquid / it] sufficient and carried out by the self-weight, after it is not absorbed with the liquid absorption bag body 30 among the liquids which came out of Cow C or 1 ** is absorbed by the liquid absorption bag body 30, leaking to the floor and dismantling base of dissolving space is prevented certainly. Since the peripheral wall section 24 of the maintenance sheet 20 exists in the outside of the liquid absorption bag body 30 especially, a liquid does not begin to leak to the outside of the maintenance sheet 20. Even if the liquid which collected on the bottom surface part 22 of the maintenance sheet 20 flows outside, it can dam up certainly in the peripheral wall section 24. In drawing 2 , the oil level (a two-dot chain line shows) of the liquid part B is in a location lower than the peripheral wall section 24, and does not leak to the outside of the peripheral wall section 24.

[0035]

<Processing after a demolition>

A demolition and inspection are completed and disposal of the liquid absorption mat 10 after removing livestock, such as Cow C, is carried out.

At this time, it is necessary to deal with it so that neither the liquid by which absorption maintenance was carried out, nor the liquid which collected on the maintenance sheet 20 may be leaked to the liquid absorption bag body 30 outside.

The whole liquid absorption mat 10 can be carried out putting the liquid absorption bag body 30 on the maintenance sheet 20, and abandonment processing can be presented. The liquid absorption mat 10 can be folded up from an outside to the inside, or can be involved in, and it can also be dealt with in the condition of having collected small. The liquid absorption mat 10 can also be bound and dealt with on a string or a tape from an outside.

[0036]

The liquid absorption bag body 30 can be picked out from the maintenance sheet 20, and it can also be dealt with separately. Only the liquid absorption bag body 30 can be put into another bag for abandonment processing, and can also be dealt with.

Among those for the liquid absorbed by the liquid absorption mat 10, if blood contacts air, it will congeal around pastiness. Blood's which congealed losing and flowing out or giving a fluidity decreases. After being in this condition, handling is easy if the liquid absorption mat 10 is removed from the maintenance sheet 20.

As abandonment processing, incineration disposal is usually desirable.

[Tubed sheet stock]

As for the operation gestalt shown in drawing 4 and drawing 5, said operation gestalt and structure of the maintenance sheet 20 differ from each other.

[0037]

As shown in drawing 5, what cut out the resin sheet fabricated by tubed to predetermined die length as a material of the maintenance sheet 20 is used. On one side of a tube-like object 21, aperture 24a for forming the peripheral wall section 24 is clipped.

If the joint 26 by heat adhesion is formed in such the both-ends side of a tube-like object 21, the maintenance sheet 20 shown in drawing 4 (a) and (b) will be obtained. The peripheral wall section 24 is formed in the outside of aperture 24a the side side on all sides. In the side side which does not form a joint 26, it will be constituted from the bottom surface part 22 by the sheet with which the peripheral wall section 24 continued.

Compared with said operation gestalt, the formation part of the joint 26 by heat adhesion becomes half. Manufacture of a tube-like object 21 can be mass-produced continuously.

[0038]

[Folding formation of the peripheral wall section]

The operation gestalt shown in drawing 6 folds up the flat sheet stock of one sheet, and forms the maintenance sheet 20.

The sheet stock which makes the shape of a rectangle of the magnitude which applied the width of face of the peripheral wall section 24 to the magnitude of the bottom surface part 22 is prepared, and the peripheral wall section 24 consists of turning up each side of sheet stock inside.

As shown in drawing 6 (b), in the four corners of the maintenance sheet 20, the clinch part of the both-sides side which intersects perpendicularly will pile up. Heat adhesion of the superposition part of the side side is carried out, and a joint 26 is formed.

[0039]

With this operation gestalt, the maintenance sheet 20 equipped with the bottom surface part 22 and the peripheral wall section 24 can be manufactured only by the clinch activity and the heat adhesion activity from the rectangle sheet stock of one sheet.

[The maintenance sheet which has a handle part]

While the sheet stock which makes the shape of a rectangle of one sheet is used for the operation gestalt shown in drawing 7, a handle part 27 is formed in the four corners of the maintenance sheet 20.

As shown in drawing 7 (b), the neighborhood of sheet stock is turned up. In the four-corners section, the surplus sheet stock was not folded up like said drawing 6 (b), but is bent from the location of 45 degrees to the upper part in the middle of both sides. The part bent up becomes the triangle-like handle part 27. Heat adhesion of the part for root Motobe, a handle part 27, is carried out, and a joint 26 is formed.

[0040]

This handle part 27 can be used for the key at the time of lifting the maintenance sheet 20 or moving. If the handle part 27 is turned up on the peripheral wall section 24 of the single-sided side, it will not become obstructive at the handling of transportation storage of the maintenance sheet 20 etc.

If the handle part 27 is unnecessary, cutting removal can also be carried out on a joint 26.

[The inclined peripheral wall section]

The operation gestalt shown in drawing 8 will be inclined by the peripheral wall section 24 to the bottom surface part 22.

Fundamental structure and the fundamental manufacture approach are common in the above mentioned operation gestalt of drawing 7.

[0041]

however, the inclination which becomes high from a periphery side at a central site, without forming a joint 26 in the root of the handle part 27 parallel to the bottom surface part 22 -- it forms in a line.

Consequently, as shown in drawing 8 (b), will be inclined by the peripheral wall section 24 at an

include angle theta to the bottom surface part 22. The peripheral wall section 24 of four sides constitutes 4 **** trapezoidal shape as a whole. It is set to whenever [tilt-angle / of theta = 20-60 degrees], i.e., a standing-up include angle, and theta = 30 degrees is more desirable.

With the above-mentioned operation gestalt, in case the maintenance sheet 20 is equipped with the liquid absorption bolster material 30, even if it does not make the peripheral wall section 24 transform, the liquid absorption bolster material 30 can be easily inserted between the peripheral wall section 24 and the bottom surface part 22. However, if the liquid absorption bolster material 30 is pushed in so that the peripheral wall section 24 may be made to transform further, a prevention operation of the liquid absorption bolster material 30 by the peripheral wall section 24 can be strengthened.

[0042]

In addition, at the time of transportation storage of only the maintenance sheet 20, while the peripheral wall section 24 had been made to stand up in the state of an inclination, it may be dealt with, and it can also change into the condition of having folded up the flexible peripheral wall section 24 and having put on the bottom surface part 22.

[Formation of a hanging hole]

The operation gestalt shown in drawing 9 has established the hanging hole in the four corners of the maintenance sheet 20.

The fundamental structure and the fundamental manufacture approach of the maintenance sheet 20 are common in the operation gestalt of said drawing 7, and form the same handle part 27. However, heat adhesion of the whole handle part 27 is carried out, and it is made the thermal bond section 26. Reinforcement can be raised by the sheet stock of two sheets being stuck.

[0043]

The hanging hole 29 has penetrated in the center of a handle part 27. hooking a hook, a rope, etc. on a hanging hole 29, or letting it pass -- migration of the liquid absorption mat 10 -- it has and comes to be able to do raising easily Touching the bottom surface part 22 and the liquid absorption bag body 30 of the maintenance sheet 20 with which the amount of [of livestock] liquid collected is avoided.

The shrinkage ring which consists of the same material as the maintenance sheet 20 can be stuck on the perimeter of a hanging hole 29, and a hanging hole 29 can also be reinforced with the above-mentioned operation gestalt. The piece of a sheet which has the handle part which it has at the time of the handling of the liquid absorption mat 10, and a hanging hole 29 independently [the handle part 27 produced in the four corners by bending of the maintenance sheet 20] can also be stuck on the maintenance sheet 20.

[0044]

[Arrangement of a liquid absorption bag body]

As for the operation gestalt shown in drawing 10 - drawing 12, the magnitude of the liquid absorption bag body 30 and arrangement differ from the operation gestalt of said drawing 1. In the operation gestalt of drawing 10, the maintenance sheet 20 is equipped with a total of six liquid absorption bag bodys 30 of two trains in each three trains. This gestalt is suitable for constituting the liquid absorption mat 10 of a large area in comparison. For example, the application which applies to a large-sized cow or carries the whole body of small livestock is mentioned.

As for the operation gestalt of drawing 11, the rectangular maintenance sheet is equipped with two liquid absorption bag bodys 30. This gestalt is effective in keeping only the head of the livestock after dismantling, when there are few dismantling of small livestock and burst sizes for a liquid.

[0045]

Four liquid absorption bag bodys 30 with which the operation gestalt of drawing 12 makes a rectangle are arranged at the point symmetry form. The space which the bottom surface part 22 of the maintenance sheet 20 has exposed is formed in the center of four liquid absorption bag bodys 30. This space is effective in making the amount of [which was emitted from livestock] liquid reach to the front face of the bottom surface part 22 quickly. It can prevent flowing and falling the front face of the liquid absorption bag body 30 outside. It can use also for inspecting

the amount for a liquid, the lump condition of blood, etc. that central space was covered after dismantling.

[0046]

[Translation done.]

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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

EXAMPLE

[Example]

The liquid absorption mat 10 of this invention is manufactured, and the result of having evaluated the engine performance is shown.

[Liquid absorption ****a]

"The cone and **S" (trade name) by the environmental device company were used. It is about 50mm in thickness in the rectangle of 350x500mm of appearances. The liquid absorption wafer 34 cuts out absorptivity polymer combination pulp paper [the Ino paper company make] and a porous thermal bond nonwoven fabric [the Kinsei Seishi make and an embossing processing article] in the shape of [of 1cm of die-length / of about 10cm / x ****] a strip of paper. The rayon fiber and the pulp fiber content mesh-like nonwoven fabric [the Sansho Shigyo K.K. make] are used for the hold bag 32. The hold bag 32 is filled up with 200g of liquid absorption wafers 34.

[0047]

[Liquid absorption mat A]

It has the structure shown in drawing 11 . The maintenance sheet 20 consists of a polyethylene sheet with a thickness of 100 micrometers, and the rectangle whose appearance is 57x67cm, and the width of face of a joint 26 are width of face of W= 6cm of about 1cm and the peripheral wall section 24, L= 65cm (long side side) of inside distance dimensions of the peripheral wall section 24, i.e., side length, and L= 55cm (shorter side side).

Two pieces and the maintenance sheet 20 were equipped with liquid absorption **** a.

[Liquid absorption mat B]

It has the structure shown in drawing 12 . The maintenance sheet 20 consists of a polyethylene sheet with a thickness of 100 micrometers, and the square whose appearance is 77cm per side, and the width of face of a joint 26 are width of face of W= 6cm of about 1cm and the peripheral wall section 24, and L= 75cm of side length of the peripheral wall section 24.

[0048]

Four pieces and the maintenance sheet 20 were equipped with liquid absorption **** a.

[Liquid absorption mat C]

It has the structure shown in drawing 10 . The maintenance sheet 20 consists of a polyethylene sheet with a thickness of 100 micrometers, and the square whose appearance is 100cm per side, and the width of face of a joint 26 are width of face of W= 10cm of about 1cm and the peripheral wall section 24, and L= 98cm of side length of the peripheral wall section 24.

Six pieces and the maintenance sheet 20 were equipped with liquid absorption **** a.

[Artificial blood absorption test]

The artificial blood which comes to adjust properties, such as viscosity, like blood was used.

[0049]

The liquid absorption mat A was able to be made to carry out absorption maintenance of the artificial blood of about 8 L. Although several drops of artificial blood dispersed around during the activity, it was extent which is satisfactory practically.

The liquid absorption mat B was able to be made to carry out absorption maintenance of the artificial blood of about 12 L. There was no scattering to a perimeter.

[Dismantling implementation trial]

1) BSE infection inspection of a cow with a weight of about 600kg was conducted using the liquid absorption mat C. The ****(ed) death cow is laid to the floor of a demolition place, a little head of a cow is raised, the liquid absorption mat C is inserted into the bottom of it, and it was made for the head of a cow to appear on the liquid absorption mat C. Then, the demolition for conducting BSE infection inspection was performed by the usual work habits. Specifically the neck of a cow was cut, the medulla oblongata was taken out from the head, and the inspection sample was extracted.

[0050]

Since it was dismantling immediately after death, comparatively a lot of blood (about 30L) was emitted for a short time. Absorption maintenance of the blood was carried out on the liquid absorption mat C. Although several 10ml blood dispersed around during the activity, it was extent which is satisfactory practically.

After blood solidified, even if the liquid absorption mat C after a demolition took out liquid absorption **** a from the maintenance sheet, blood did not hang it down. The liquid absorption mat C was able to be altogether disposed of by incineration processing.

2) BSE infection inspection of a cow with a weight of about 650kg was conducted using the liquid absorption mat C. Work habits are the same as that of the above. However, the cow about 5 hours after death was used. The blood burst size was presumed about 5L. All the emitted blood could carry out absorption maintenance on the liquid absorption mat C, and there was no blood which leaks on the outskirts.

[0051]

[Evaluation]

The result of the above-mentioned trial showed the following things.

a) If it is the liquid absorption mat C which equipped the 100x100cm maintenance sheet 20 with six liquid absorption **** a, it turns out that it is applicable also to the large-sized livestock immediately after death with many blood burst sizes good. If liquid absorption **** a is changed into a more large-sized thing, it will be thought that at least four pieces can respond. The livestock by which the time amount after death was formed are enough if 2-4 liquid absorption **** a are used.

b) Presume the amount for the liquid emitted by the weight and the inspection approach of livestock,

Liquid adsorption per the total amount / liquid absorption **** for an effluent object = the number of liquid absorption **** a -- (1)

What is necessary will be to be alike and just to use the corresponding liquid absorption mat 10.

[0052]

Since it turned out that the absorption maintenance of the about [abbreviation 5L] blood can be carried out per piece, if said formula (1) is applied, the design of the liquid absorption mat 10 can do liquid absorption **** a.

[0053]

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The top view of the liquid absorption mat showing the operation gestalt of this invention

[Drawing 2] The sectional view of a busy condition

[Drawing 3] The sectional view of the maintenance sheet before use

[Drawing 4] The top view (a) and sectional view (b) showing another operation gestalt of a maintenance sheet

[Drawing 5] The perspective view of a tubed material

[Drawing 6] The top view (a) and important section perspective view (b) of the maintenance sheet showing another operation gestalt

[Drawing 7] The top view (a) and important section perspective view (b) of the maintenance sheet showing another operation gestalt

[Drawing 8] The important section perspective view (a) and top view (b) showing another operation gestalt of a maintenance sheet

[Drawing 9] The important section perspective view of the maintenance sheet showing another operation gestalt

[Drawing 10] The top view of the liquid absorption mat showing another operation gestalt

[Drawing 11] The top view of the liquid absorption mat showing another operation gestalt

[Drawing 12] The top view of the liquid absorption mat showing another operation gestalt

[Description of Notations]

10 Liquid Absorption Mat

20 Maintenance Sheet

21 Tube-like Object

22 Bottom Surface Part

24 Peripheral Wall Section

24a Aperture

26 Joint

27 Handle Part

29 Hanging Hole

30 Liquid Absorption Bag Body

32 Hold Bag

34 Liquid Absorption Wafer

B Oil level

C Cow

H Head

[Translation done.]

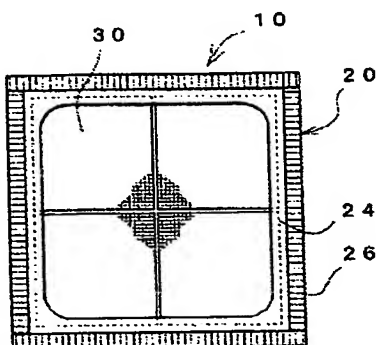
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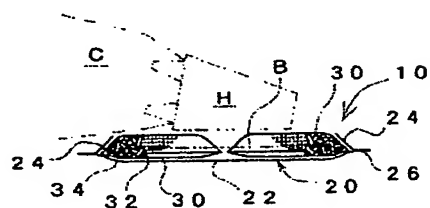
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DRAWINGS

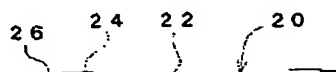
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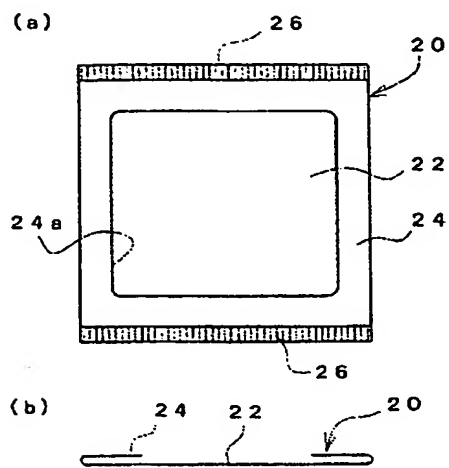
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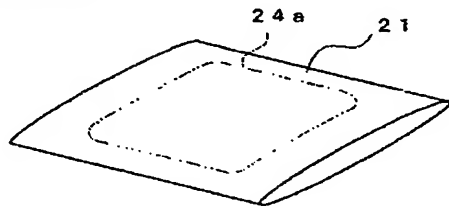
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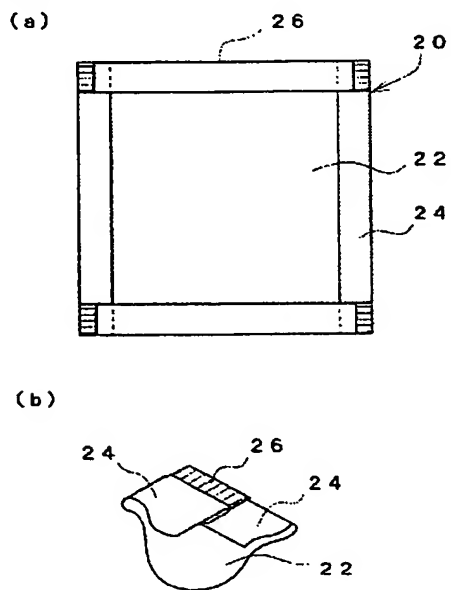
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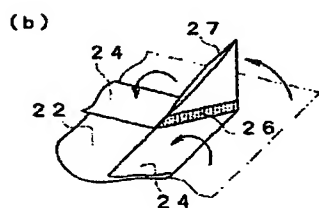
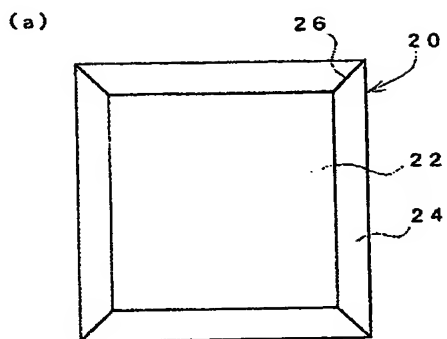
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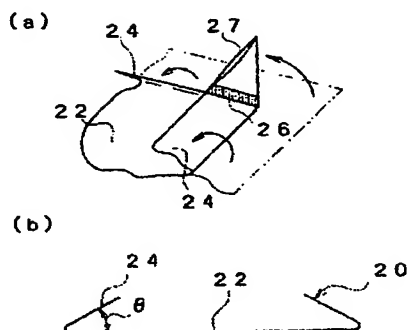
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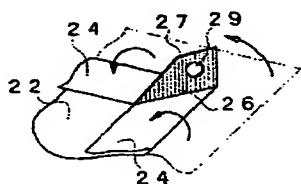
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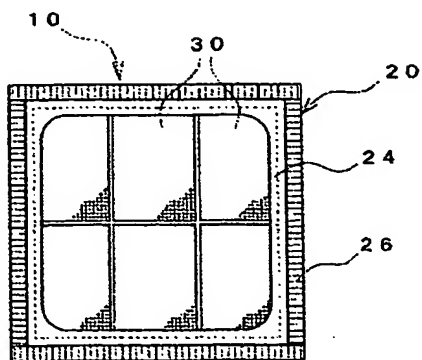
[Drawing 8]



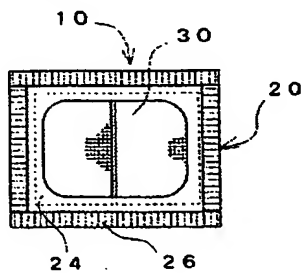
[Drawing 9]



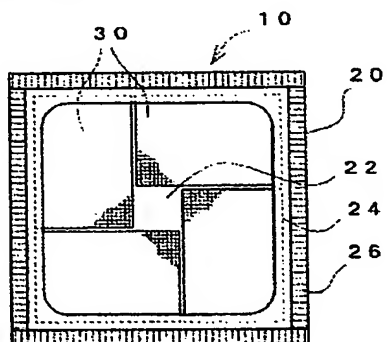
[Drawing 10]



[Drawing 11]



[Drawing 12]



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